



RECEIVED
JAN 07 2003
TECH CENTER 1600/2900

EXHIBIT A
PENDING CLAIMS
AS OF DECEMBER 31, 2002
IN U.S. PATENT APPLICATION SERIAL NO. 09/724,419
ATTORNEY DOCKET NO. 6923-102

41. An embryonated egg less than ten days old containing a recombinantly engineered attenuated negative strand RNA virus with impaired interferon antagonist activity, wherein said virus is not influenza C virus.

42. An embryonated egg less than ten days old containing a recombinantly engineered attenuated influenza virus having a mutation in the NS1 gene that diminishes or eliminates the ability of the NS1 gene product to antagonize the cellular interferon response, wherein said virus is not influenza C virus.

43. The embryonated egg of claim 43, wherein the embryonated egg is six days old.

44. An embryonated egg containing in the allantoic cavity an attenuated influenza virus having a mutation in the NS1 gene that diminishes or eliminates the ability of the NS1 gene product to antagonize the cellular interferon response, wherein the embryonated egg is six to nine days old and said virus is not influenza C virus.

45. An embryonated egg less than 10 days old containing delNS1.

46. The embryonated egg of Claim 41, wherein the negative strand RNA virus is influenza A virus, influenza B virus, respiratory syncytial virus, parainfluenza virus, mumps virus, measles virus, Newcastle disease virus, or vesicular stomatitis virus.

47. The embryonated egg of Claim 41 or 42, wherein the egg is a six to nine days old chick egg.

48. The embryonated egg of Claim 41, wherein the attenuated negative strand RNA virus is engineered to encode an epitope derived from another virus.

49. The embryonated egg of Claim 41, wherein the attenuated negative strand RNA virus has a segmented genome comprising at least one segment derived from a different virus.

50. The embryonated egg of Claim 42 or 43, wherein the attenuated influenza virus is engineered to encode an epitope derived from another virus.

51. The embryonated egg of Claim 42 or 43, wherein the attenuated influenza virus has a segmented genome comprising at least one segment derived from a different virus.

52. The embryonated egg of Claim 43, wherein the attenuated influenza virus is genetically engineered.

53. The embryonated egg of Claim 42 or 43, wherein the mutation in the NS1 gene is a deletion at the C-terminal of NS1.

54. The embryonated egg of Claim 53, wherein the NS1 gene encodes truncated NS1 proteins consisting of amino acid residues 1-60, amino acid residues 1-70, amino acid residues 1-90, amino acid residues 1-99, amino acid residues 1-100, amino acid residues 1-110, amino acid residues 1-120, amino acid residues 1-124, or amino acid residues 1-130 of the wild-type NS1.

55. The embryonated egg of Claim 42 or 43, wherein the mutation in the NS1 gene is a deletion at the amino-terminal of NS1.

56. The embryonated egg of Claim 42 or 43, wherein the influenza virus is influenza A or B virus.

57. The embryonated egg of Claim 42 or 43, wherein the mutation in the NS1 gene is responsible for the attenuated phenotype of the influenza virus.

58. An interferon deficient cell containing a recombinantly engineered attenuated negative strand RNA virus with impaired interferon antagonist activity, wherein said virus is not influenza C virus and the interferon deficient cell line is not Vero cells and is not Stat1(-) cell lines.

59. An interferon deficient cell line containing an attenuated influenza virus having a mutation in the NS1 gene that diminishes or eliminates the ability of the NS1 gene product to antagonize the cellular interferon response, wherein said virus is not influenza C virus and the interferon deficient cell line is not Vero cells and is not Stat1(-) cell lines.

60. An interferon deficient cell line containing delNS1, wherein the interferon deficient cell line is not Vero cells.

61. The interferon deficient cell line of Claim 58, wherein the negative strand RNA virus is influenza A virus, influenza B virus, respiratory syncytial virus, parainfluenza virus, mumps virus, measles virus, Newcastle disease virus, or vesicular stomatitis virus.

62. The interferon deficient cell line of Claim 58, wherein the attenuated negative strand RNA virus is engineered to encode an epitope derived from another virus.

63. The interferon deficient cell line of Claim 58, wherein the attenuated negative strand RNA virus has a segmented genome comprising at least one segment derived from a different virus.

64. The interferon deficient cell line of Claim 59, wherein the attenuated influenza virus is genetically engineered.

65. The interferon deficient cell line of Claim 59, wherein the mutation in the NS1 gene is a deletion at the C-terminal of NS1.

66. The interferon deficient cell line of Claim 65, wherein the NS1 gene encodes truncated NS1 proteins consisting of amino acid residues 1-60, amino acid residues 1-70, amino acid residues 1-90, amino acid residues 1-99, amino acid residues 1-100, amino acid residues 1-110, amino acid residues 1-120, amino acid residues 1-124, or amino acid residues 1-130 of the wild-type NS1.

67. The interferon deficient cell line of Claim 59, wherein the mutation in the NS1 gene is a deletion at the amino-terminal of the NS1.

68. The interferon deficient cell line of Claim 59, wherein the influenza virus is influenza A or B virus.

69. The interferon deficient cell line of Claim 59, wherein the mutation in the NS1 gene is responsible for the attenuated phenotype of the influenza virus.

70. The interferon deficient cell line of Claim 58, 59 or 60, wherein the cell line expresses a transgene encoding an inhibitor of the interferon system.